## REMARKS

Applicants' undersigned representative wishes to thank Examiner Martinell for the helpful and courteous interview that was conducted on June 13, 2007. As a follow-up to the interview, claims 1-4 have been canceled, without prejudice. Claims 5 and 6 have been rewritten in independent form, and new claims 7-12 have been added. The application as amended contains claims 5-12 – eight independent claims and a total of eight claims. A credit card payment form (\$1,000.00) is being filed herewith for the additional independent claims. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

Applicant respectfully submits that the pending claims are in proper form. Original claim 3 was objected to as being "awkward." Applicant respectfully submits, however, that the original preamble language should be acceptable, to avoid mischaracterization of the invention.

Claims 5 and 6 are provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent Applications Nos. 10/976,039, 10/975,453, 10/543,759, 10/535,407, 10/534,979, 10/496,588, 10/372,923 and 10/153,691. Reconsideration is respectfully requested. The subject matter of claims 5 and 6 is patentably distinct from that of the claims of Applications Nos. 10/976,039, 10/975,453, 10/543,759, 10/535,407, 10/534,979, 10/496,588, 10/372,923 and 10/153,691.

The subject matter of claim 5, for example, has the step of "determining whether . . . there is consistency between . . . positional information," and also the step of "alerting a party that received . . . information." The invention of claim 6 has the step of "disclosing information concerning a party." There is nothing remotely like such steps in the subject matter of the claims of Applications Nos. 10/976,039, 10/975,453, 10/543,759, 10/535,407, 10/534,979, 10/496,588, 10/372,923 and 10/153,691, and the Office Action provides no explanation to the contrary. Therefore, the provisional rejection of claims 5 and 6 should be withdrawn. See M.P.E.P. § 804.

Claims 5 and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Reconsideration is respectfully requested.

The Office Action characterizes the term "semantic information," in original claim 3, as being vague and indefinite. Please note, however, that the term "semantic information" is not recited in isolation. Claims 5 and 6 limit the term to that which is "implied by [transmitted] nucleotide sequence-related information." Thus, when the claims are considered as a whole, and in the context of the specification, especially page 8, first full paragraph, they should be found to be in compliance with § 112. There does not appear to be any ambiguity in the claims. See M.P.E.P. § 2173.02.

Further, the Office Action characterizes the phrase "information implied" as being vague and indefinite. Please note, however, the phrase is not recited by itself. The claims go on to specify that which implies the information – the information is "implied by the nucleotide sequence-related information transmitted in step (c)." The claims should be considered as a whole, and in the context of the specification, especially page 5, last line – page 6, line 5.

The claims have been amended to obviate the concern raised on page 4 of the Office Action, with respect to "corresponding . . . ."

Turning now to item (o) at the top of page 5 of the Office Action, claims 5 and 6 recite the step of "obtaining . . . information associated with positional information." The information that is obtained is "nucleotide sequence-related information," and it is obtained "from among a plurality of pieces of . . . information." According to the claims, the said "pieces . . . of information" are "pieces of <u>nucleotide sequence-related</u> information <u>associated with positional information</u>." Further, the positional information with which the obtained information is associated itself corresponds to "the positional information received in step (a)."

The claims should be understood in the context of the examples provided in Applicants' specification and drawings, although they should not be limited to such examples. Thus, in connection with the method illustrated in Figs. 6 and 7, "the positional information received in step (a)" reads on the polymorphism address received in Step SA8, and the information "obtained" reads on the polymorphism pattern read out in Step SA10. The "plurality of pieces of nucleotide sequence-related information associated with positional information" reads on data II (Fig. 5), which includes polymorphism patterns associated with

polymorphism addresses. As explained during the interview, the methods of claims 5 and 6 can be performed entirely, if desired, by the personal computer 3 (Fig. 4).

Further, the Office Action contends that the word "consistency" is vague and indefinite. The contention is not understood, however. Applicants are not attempting to coin a new word, but rather have used an ordinary, English-language word consistent with its dictionary-definition meaning. Please refer to the examples provided in the specification, including page 17, lines 8+.

The claims have been amended to obviate the concerns raised on page 5, items (q), (r) and (t), of the Office Action, with respect to antecedent basis. With respect to item (u), however, there does not appear to be any antecedent basis issue in connection with claim 6.

Further, the Office Action objects to the phrase "associated with" as being not clearly defined. Please note, however, the phrase is used in the claims in accordance with its ordinary meaning. The phrase is a common element of the English language. There does not appear to be any particular reason why it should create any problem in the present claims, and the Office Action provides no explanation to the contrary.

Claims 5 and 6 are rejected under 35 U.S.C. § 102 as being anticipated by Jacino, Denton and Qiagen. Reconsideration is respectfully requested.

As explained during the interview, claim 5 recites the step of determining whether there is consistency between (1) the positional information received in step (d) and (2) the positional information related to the information transmitted in step (c). The determining step is illustrated by Step SA17 in Fig. 7, a step which may be performed by the personal computer 3. The step is an important aspect of the claimed invention. The step is not disclosed or suggested by Jacino, Denton or Qiagen, especially not in the text passages cited in the Office Action. The references do not seem to have anything about any comparison of any positional information, much less the determining step of claim 5. Accordingly, claim 5 should be allowable over Jacino, Denton and Qiagen.

Further, claim 5 recites the step of "alerting a party that received the nucleotide sequence-related information transmitted in step (c)." The step is illustrated by Step SA18 in Fig. 7. The step is not disclosed or suggested by Jacino, Denton or Qiagen, and the Office Action provides no explanation to the contrary. Accordingly, this is another reason why claim 5 should be allowable.

Claim 6, like claim 5, recites the step of "determining whether or not there is consistency between the positional information received in step (d) and positional information related to the nucleotide sequence-related information transmitted in step (c)." Accordingly, claim 6 should be allowable along with claim 5.

Further, claim 6 recites the step of "disclosing information concerning a party that received the . . . information transmitted in step (c) . . . ." An example is described in the specification at page 19, last line – page 20, line 9. The step is not disclosed or suggested by Jacino, Denton or Qiagen, and the Office Action provides no explanation to the contrary. Accordingly, this is another reason why claim 6 should be allowable.

New claims 7-12 recite limitations similar to those discussed above, and should be allowable at least for similar reasons. Allowance of the application with claims 5-10 is solicited.

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Respectfully submitted,

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